

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANT: GUILLERMO C. BAZAN ET AL.) Examiner: To be assigned
SERIAL NO.: 09/848,949) Art Unit: 1754
FILED: May 3, 2001)
FOR: **SOLUBLE TETRAHEDRAL**)
COMPOUNDS FOR USE IN)
ELECTROLUMINESCENT)
DEVICES)
DOCKET NO.: 1279-325(10014591))

PRELIMINARY AMENDMENT

CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 CFR 1.10, Express Mail Label No. EL136021955US, in an envelope addressed to Assistant, Commissioner for Patents, Washington, DC 20231 on AUGUST 9, 2001.

Nancy Nolen

Assistant Commissioner for Patents
Washington, D.C. 20231

Dear Sir:

Please amend the above-identified application as follows:

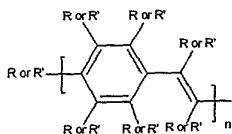
IN THE CLAIMS:

Please amend claim 10 as follows:

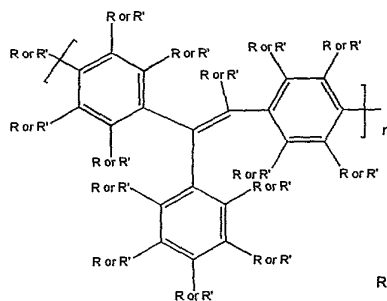
10. (Amended) The tetrahedral compound of claim 1 wherein R1, R2, R3, and R4 are each independently optoelectronic arms corresponding to formula (II) through formula (LXVIII):

08/14/2001 MYUSUF1 00000162 500337 09848949
01 FC:103 72.00 CH

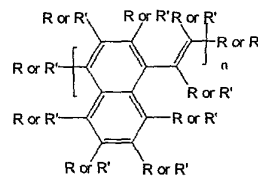
106380 6464860



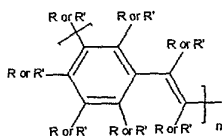
II



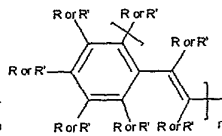
III



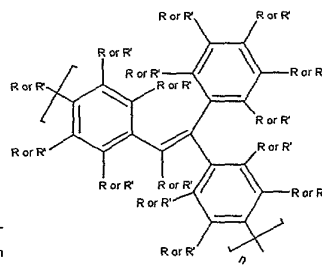
VII



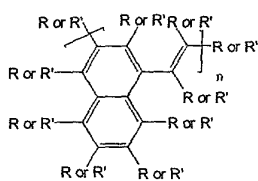
IV



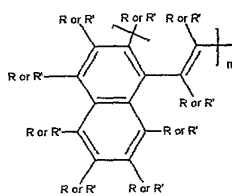
V



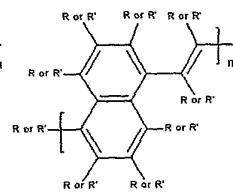
VI



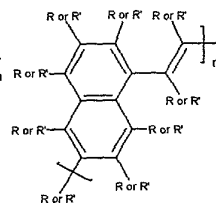
VIII



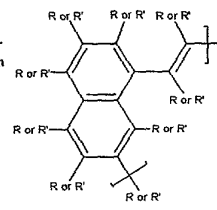
IX



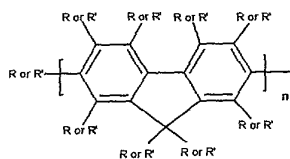
X



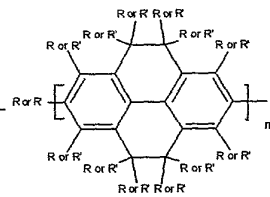
XI



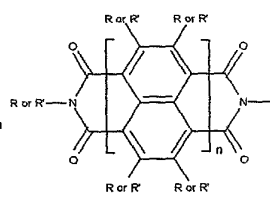
XII



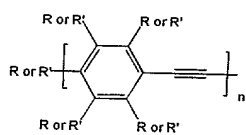
XIII



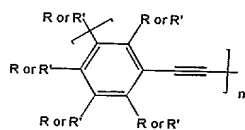
XIV



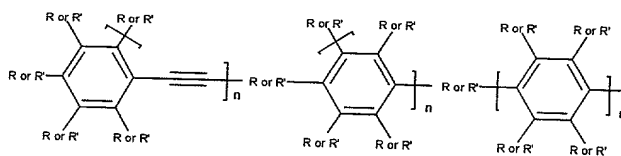
XV



XVI



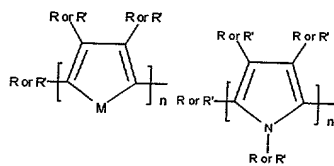
XVII



XVIII

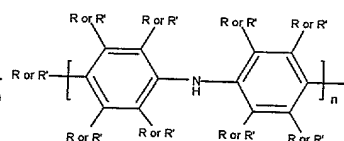
XIX

XX

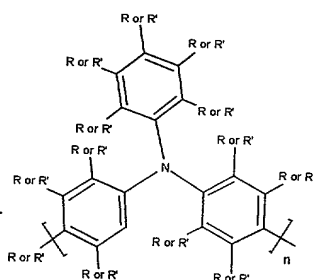


XXI

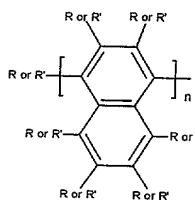
XXII



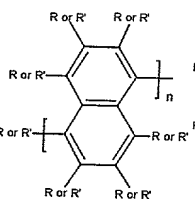
XXIII



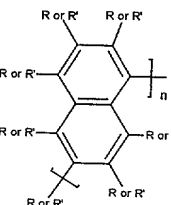
XXIV



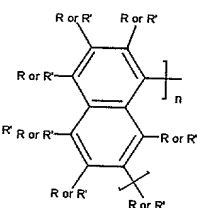
XXV



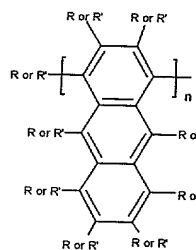
XXVI



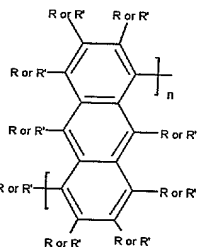
XXVII



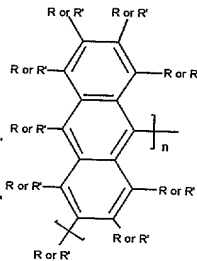
XXVIII



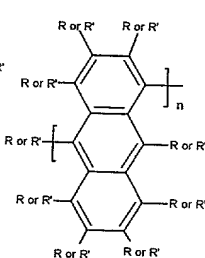
XXIX



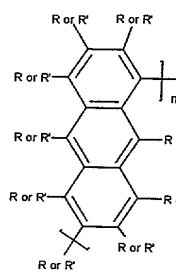
XXX



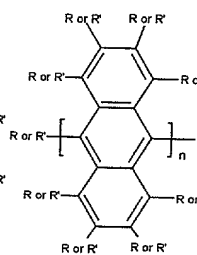
XXXI



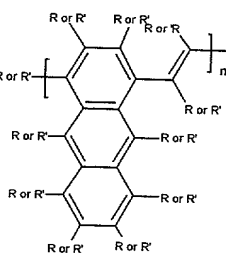
XXXII



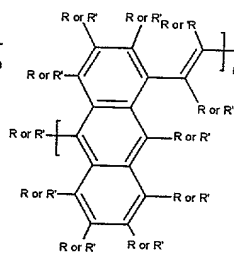
XXXIII



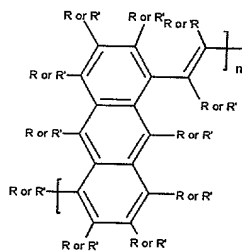
XXXIV



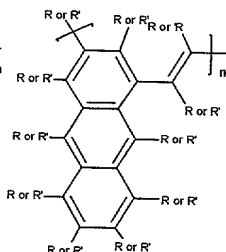
XXXV



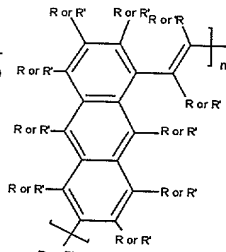
XXXVI



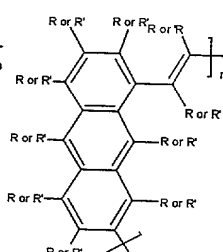
XXXVII



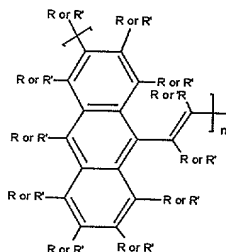
XXXVIII



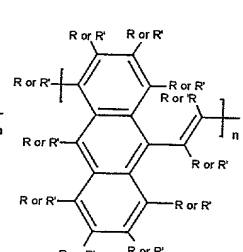
XXXIX



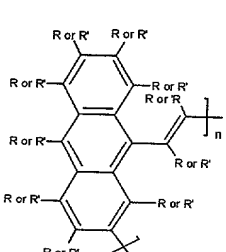
XL



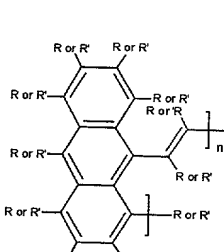
XLI



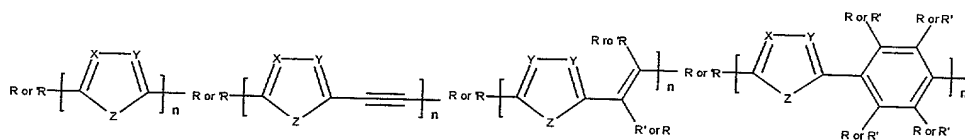
XLII



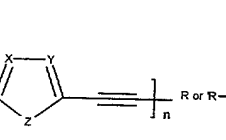
XLIII



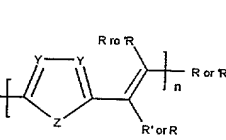
XLIV



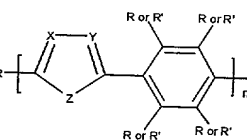
XLV



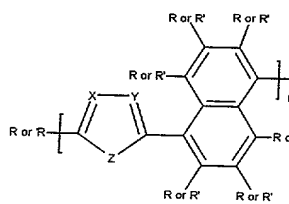
XLVI



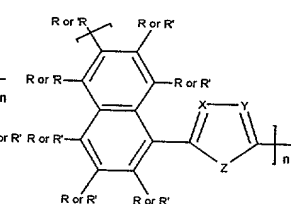
XLVII



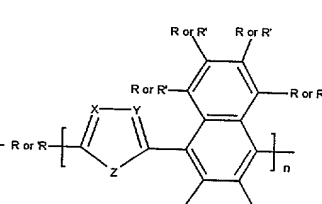
XLVIII



XLIX

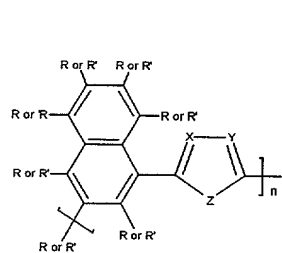


L

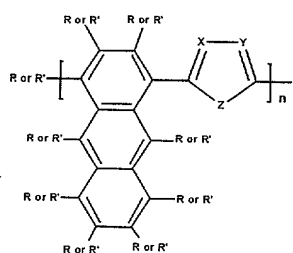


LI

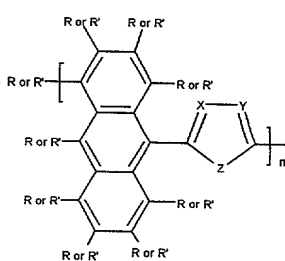
Pub. No. 6,463,660



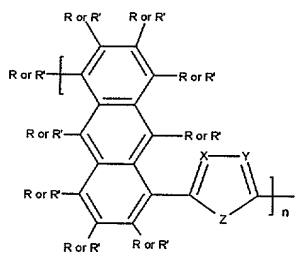
LII



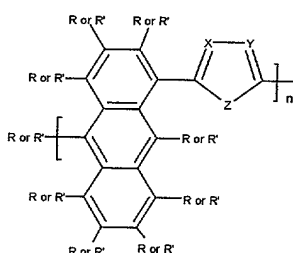
LIII



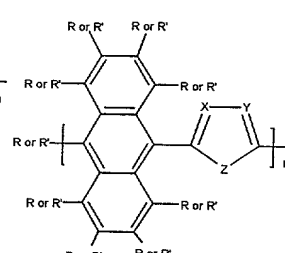
LIV



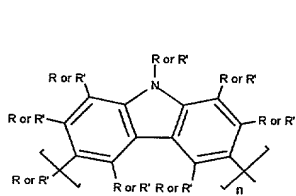
LV



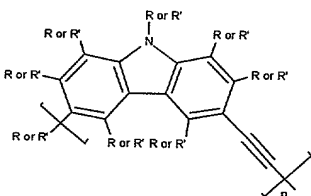
LVI



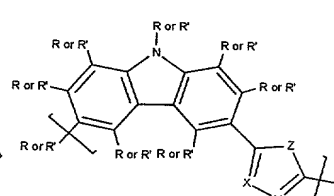
LVII



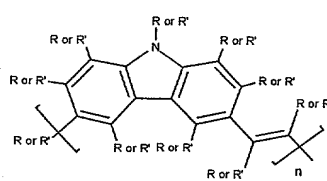
LVIII



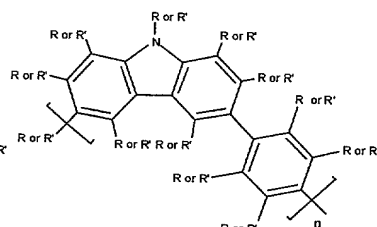
LIX



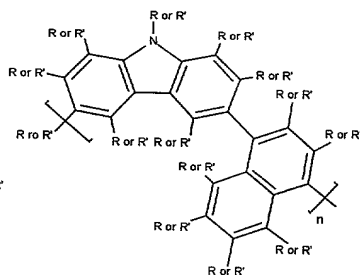
LX



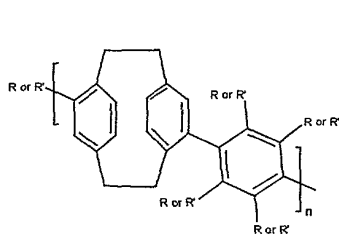
LXI



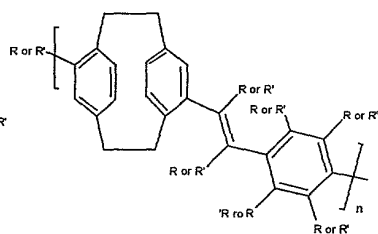
LXII



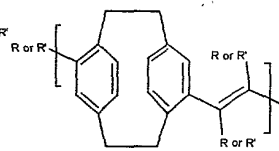
LXIII



LXIV



LXV



LXVI

wherein R is hydrogen; R' is selected from the group consisting of alkoxy, alkyl, aryl, aryloxy, cyano, halide and amido; n is an integer from 1 to 100; X and Y are independently selected from the group consisting of C-R', CR, NR and NR'; Z is selected from the group consisting of OR, OR', SR, SR' NR, NR', CRR', -CH=CH-R, -CH=CH-R', and CN; and M in formula XXI is selected from the group consisting of sulfur, selenium and tellurium.

REMARKS

Applicants respectfully request the Patent Office to enter the foregoing amendment to the claims. The amendment adds omitted page 55, attached hereto as a substitute sheet. Support for the amendment to claim 10 can be found on pages 10-11 of the specification. Accordingly, the amendment does not introduce new matter.

Attached hereto is a marked-up version of the changes made to the claims by the current amendment. The attached page is captioned "Version with markings to show changes made."

Should there be any questions, the Examiner is encouraged to telephone the undersigned.

Dated: August 9, 2001

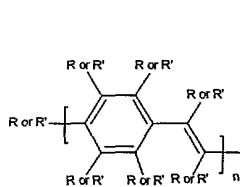
213/892-9206

Margaret Churchill

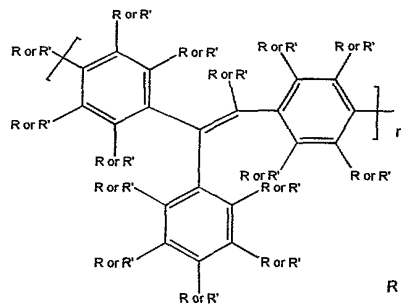
Margaret Churchill, Ph.D.
Registration No. 39,944

VERSION WITH MARKINGS TO SHOW CHANGES MADE

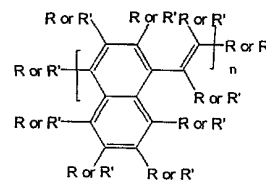
10. (Amended) The tetrahedral compound of claim 1 wherein R₁, R₂, R₃, and R₄ are each independently optoelectronic arms corresponding to formula (II) through formula (LXVIII):



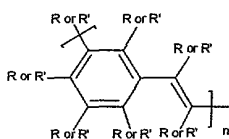
II



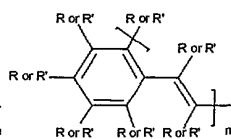
III



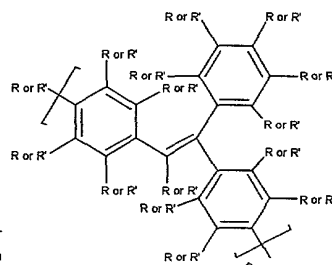
VII



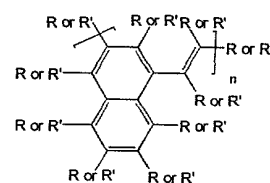
IV



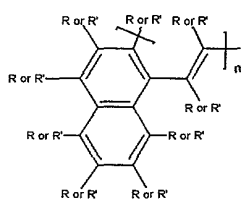
V



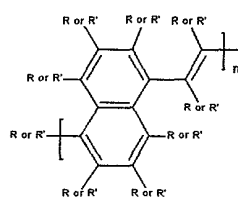
VI



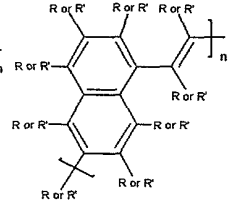
VIII



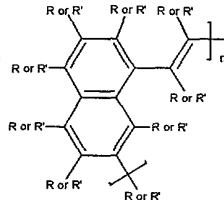
IX



X



XI



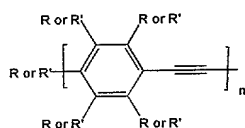
XII

The image displays three chemical structures of poly(phenylene) derivatives, labeled (a), (b), and (c). Each structure consists of a central five-membered ring fused to two benzene rings, with four phenyl groups (R or R') attached to the outer benzene rings. The structures are shown as repeating units in brackets with a subscript 'n'.

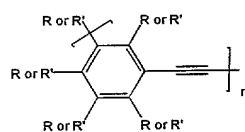
- (a) Poly(2,2',6,6'-tetraphenyl-5,5'-bibenzidine): The central five-membered ring is a benzidine derivative, with two nitrogen atoms at the 5 and 5' positions.
- (b) Poly(2,2',6,6'-tetraphenyl-5,5'-bibenzothiazole): The central five-membered ring is a benzothiazole derivative, with two sulfur atoms at the 5 and 5' positions.
- (c) Poly(2,2',6,6'-tetraphenyl-5,5'-bibenzimidazole): The central five-membered ring is a benzimidazole derivative, with two nitrogen atoms at the 5 and 5' positions.

XIV

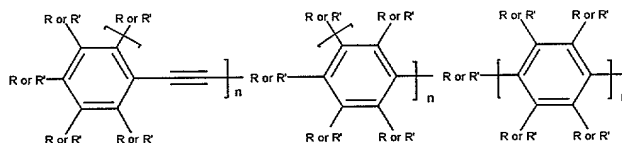
XV



XVI



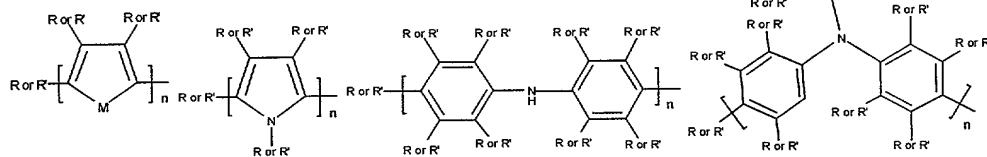
XVII



XVIII

XIX

XX

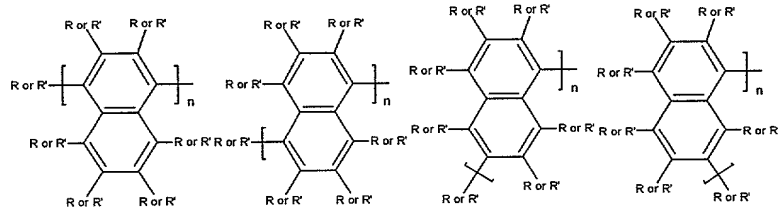


XXI

XXII

XXIII

XXIV

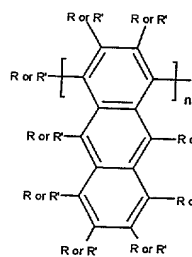


XXV

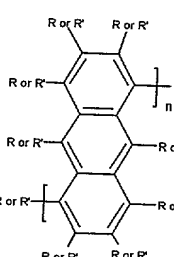
XXVI

XXVII

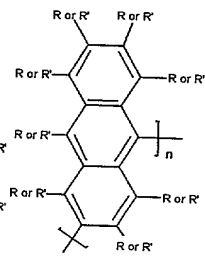
XXVIII



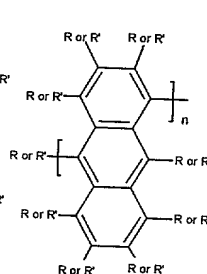
XXIX



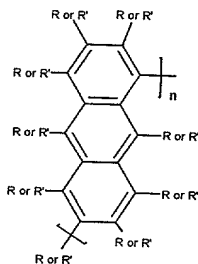
XXX



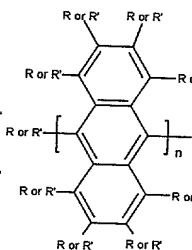
XXXI



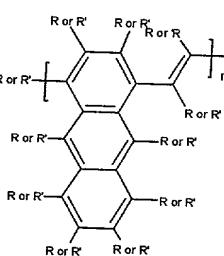
XXII



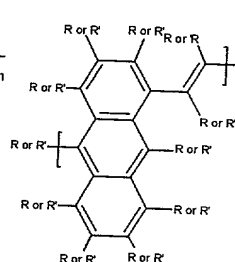
XXXIII



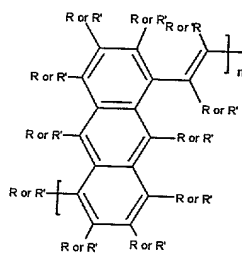
XXXIV



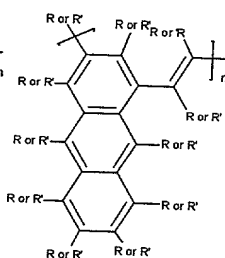
XXXV



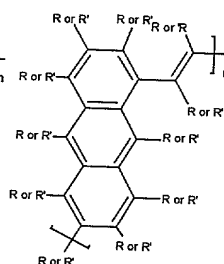
XXXVI



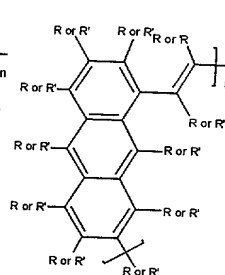
XXXVII



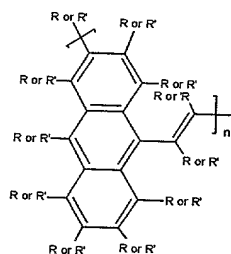
XXXVIII



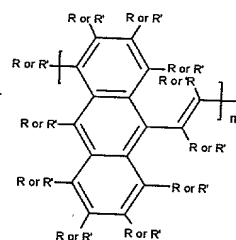
XXXIX



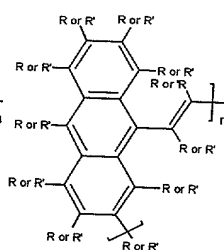
XL



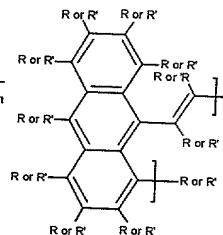
XLI



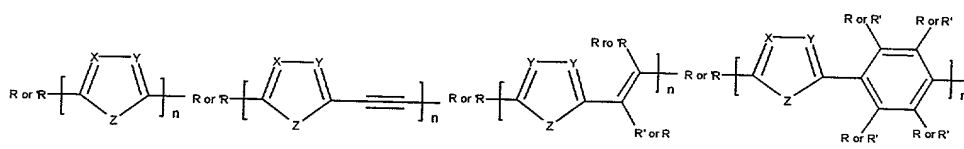
XLII



XLIII



XLIV

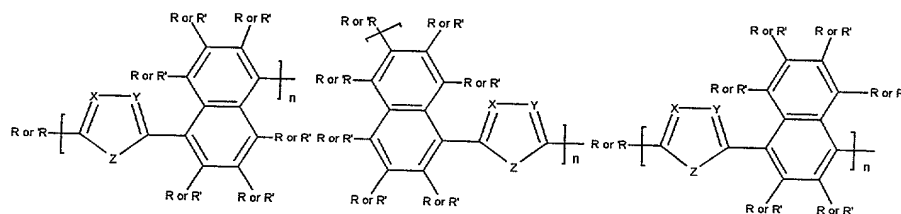


XLV

XLVI

XLVII

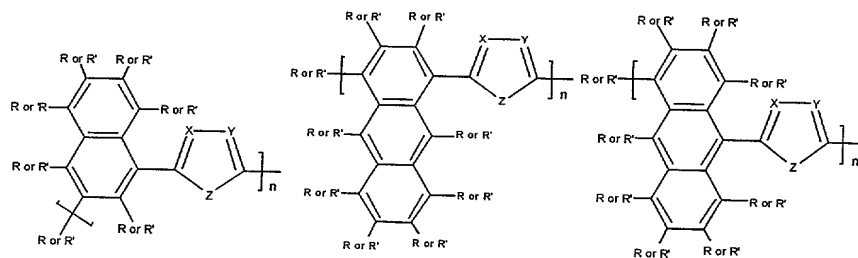
XLVIII



XLIX

L

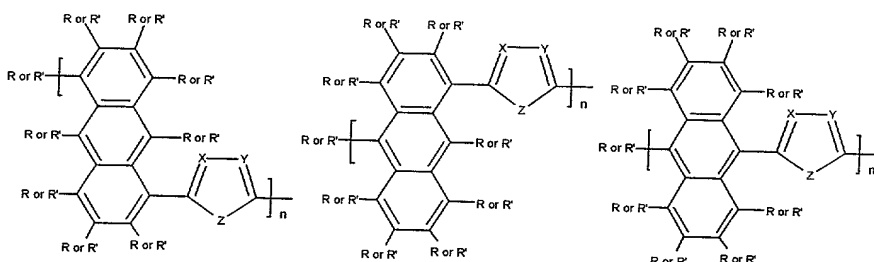
LI



LII

LIII

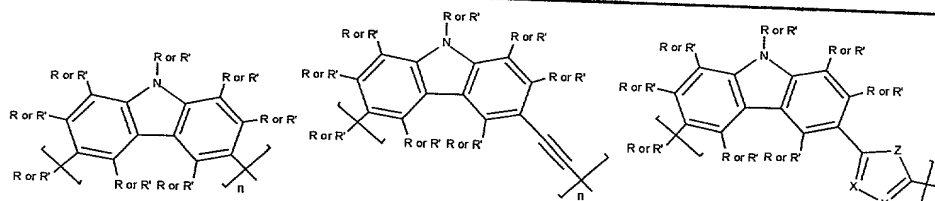
LIV



LV

LVI

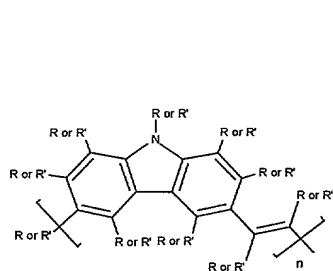
LVII



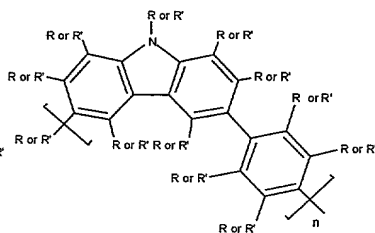
LVIII

LIX

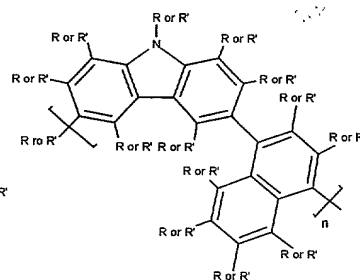
LX



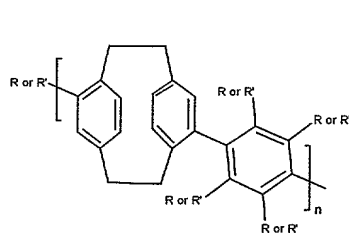
LXI



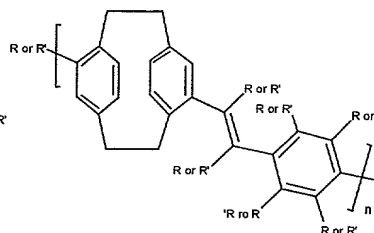
LXII



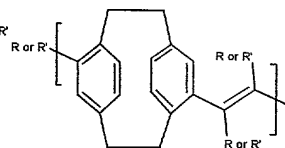
LXIII



LXIV

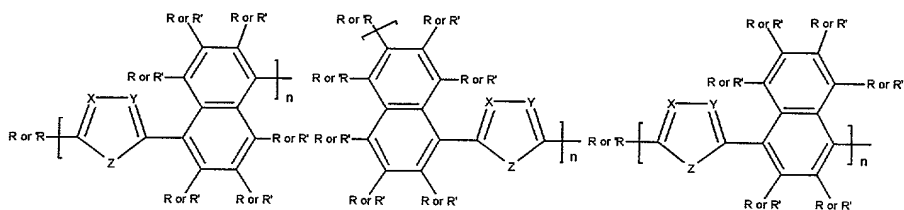


LXV



LXVI

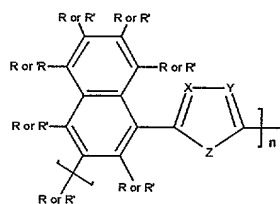
wherein R is hydrogen; R' is selected from the group consisting of alkoxy, alkyl, aryl, aryloxy, cyano, halide and amido; n is an integer from 1 to 100; X and Y are independently selected from the group consisting of C-R', CR, NR and NR'; Z is selected from the group consisting of OR, OR', SR, SR' NR, NR', CRR', -CH=CH-R, -CH=CH-R', and CN; and M in formula XXI is selected from the group consisting of sulfur, selenium and tellurium.



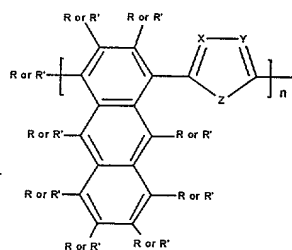
XLIX

L

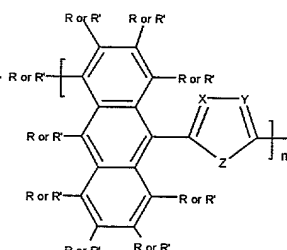
LI



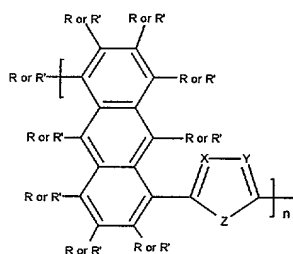
LII



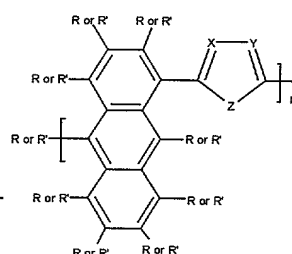
LIII



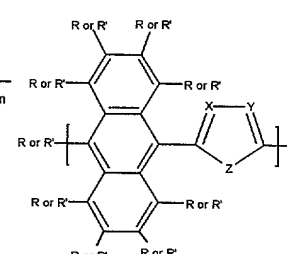
LIV



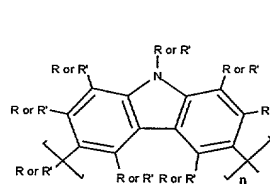
LV



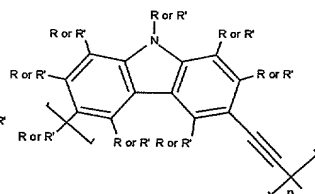
LVI



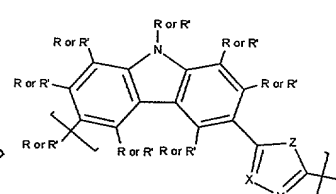
LVII



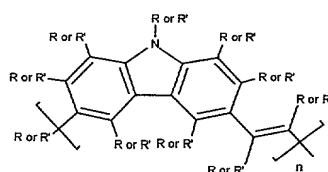
LVIII



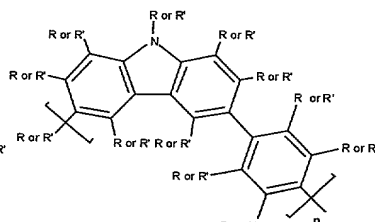
LIX



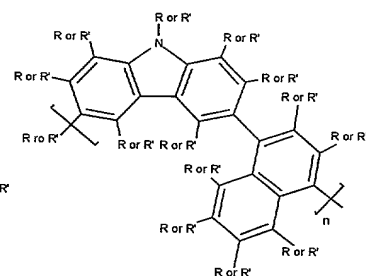
LX



LXI



LXII



LXIII